



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION 1

1 CONGRESS STREET, SUITE 1100
BOSTON, MASSACHUSETTS 02114-2023

January 25, 2005

Dawn Gallagher, Commissioner
Maine Department of Environmental Protection
#17 State House Station
Augusta, Maine 04333-0017

SUBJECT: EPA Review of 2004-submitted Water Quality Standard Revisions

Dear Commissioner Gallagher:

This is in response to your May 14, 2004 request for Environmental Protection Agency (EPA) approval of statutory and regulatory amendments of the surface water quality standards administered by the Maine Department of Environmental Protection (DEP), Bureau of Land & Water Quality. These amendments were certified by Maine's Assistant Attorney General in the Natural Resources Division as having been duly adopted pursuant to State law. EPA has completed its review of these amendments as required by §303(c) of the Clean Water Act, 33 U.S.C. §1313(c). I am pleased to approve most of the changes as described further below.

I congratulate you and your staff for a very impressive effort, particularly with regard to the adoption of Chapter 579 of DEP's Rules: Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams. Adoption of this rule is a noteworthy event in DEP's long history as a national leader in the development and implementation of biological criteria. This quantitative methodology for interpreting Maine's narrative biological criteria and aquatic life uses for rivers and streams will strengthen Maine's ability to protect its waters and further progress towards achieving the goals and objective of the Clean Water Act.

Pursuant to §303(c)(2) of the Clean Water Act and 40 C.F.R. Part 131, and based on my determination that the approved revisions are consistent with the requirements of §303 of the Act, I hereby approve the following revised standards:

- ▶ **Legislative Chapter 418 [specifically, §420 (1-B)(A), (C), (D), and (E)]**, which establishes mercury ambient water quality criteria to protect aquatic life, and criteria for human health protection based on a concentration in fish tissue, that are consistent with EPA's current Clean Water Act §304(a) criteria guidance.
- ▶ **Legislative Chapter 551, §6**, which reverses an earlier change to statute and ensures that a hearing will be held at least once every three years for the purpose of reviewing Maine's water quality standards, and revising them as appropriate, consistent with 40 C.F.R. §131.20.

- ▶ **Legislative Chapter 551, §7**, which corrects an error with regard to the boundary between freshwater and saltwater in the classification of the Denny's River.
- ▶ **Legislative Chapter 574**, which revises Class AA and Class A to allow discharges intended to assist in the restoration of endangered Atlantic Salmon.
- ▶ **Legislative Chapter 663**, which upgrades the use classification for numerous water body segments. In all cases, both the previous and new use classifications provide for the full goal uses specified at §101(a)(2) of the Clean Water Act.
- ▶ **DEP Rule, Chapter 579**, which provides a quantitative methodology for interpreting Maine's narrative biological criteria and aquatic life uses for rivers and streams.

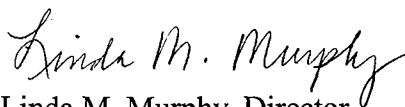
EPA's approval of Maine's surface water quality standards revisions does not extend to waters that are within Indian territories and lands. EPA is taking no action to approve or disapprove the State's standards revisions with respect to those waters at this time. EPA will retain responsibility under §303(c) and 303(d) of the Clean Water Act for those waters. The revisions summarized above are further described in *Summary: Changes to Maine's Water Quality Criteria*, ME DEP, May 13, 2004. In making this approval, we have a few comments concerning Chapters 418 and 574 (see attachment A).

Also, please note the following:

- ▶ **Legislative Chapter 418, §420 (1-B)(B)** - We are still evaluating this provision to determine whether it constitutes a revision of Maine's water quality standards; therefore we are not yet taking action with respect to this provision.
- ▶ Finally, we have determined that the remaining provisions of Chapter 551, and the additional Chapters submitted by DEP, are not new or revised water quality standards and therefore are not subject to EPA review and action under §303(c) of the Clean Water Act (see Attachment B).

My staff and I look forward to continued cooperation with the ME DEP in exercising our shared responsibility of implementing the water quality standards requirements under the Clean Water Act. If you have any questions on these issues, please do not hesitate to call me at 617-918-1501 or contact Steve Silva, Director of EPA New England's Water Quality and Maine Programs, at 617-918-1561.

Sincerely,


 Linda M. Murphy, Director
 Office of Ecosystem Protection

Enclosure

cc: Andrew Fisk, ME DEP
David Courtemanch, ME DEP
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Attachment A to January 25, 2005 Maine Water Quality Standards Approval Letter

1. Chapter 418. An Act to Implement the Recommendations of the Department of Environmental Protection on Ambient Water Quality Criteria for Mercury.

EPA is approving Chapter 418, Section 3's enactment of 38 MRSA §420(1-B)(A), (C), (D), and (E). We are continuing to evaluate §420(1-B)(B) to determine whether it constitutes a revision of Maine's water quality standards; therefore we are not yet taking action with respect to this provision.

Subsection(1-B)(A) establishes the following ambient water quality criteria for mercury:

	Freshwater Acute	Freshwater Chronic	Saltwater Acute	Saltwater Chronic	Human Health
Total Mercury	1.7 ug/l	0.91 ug/l	2.1 ug/l	1.1 ug/l	0.2 mg/kg edible tissue

The aquatic life criteria expressed as total mercury are equivalent to EPA's current CWA §304(a) recommendations for dissolved mercury as contained in National Recommended Water Quality Criteria: 2002, EPA-822-R-02-047, November 2002. Maine's aquatic life criteria are as protective as EPA's recommendations; however, EPA's 1995 Updates: Water Quality Criteria Documents for the Protection of Aquatic Life in Ambient Water, EPA-820-B-96-001, September 1996 contain a note that the freshwater mercury chronic criterion might not adequately protect rainbow trout, coho salmon, and bluegill. While EPA expects that water quality based control of mercury in Maine will typically be driven by the human health criterion, this caution concerning aquatic life protection should be considered if the chronic freshwater criterion is applied absent more stringent actions to meet the human health criterion.

EPA also believes that Maine's tissue based human health criterion is as protective as EPA's tissue based criterion recommendation of 0.3 mg/kg for methylmercury, published on January 8, 2001 (66 FR 1344-1359). Maine's value is one third lower than EPA's, and is expressed in terms of total mercury (while methylmercury and total mercury in tissue are essentially equivalent in upper trophic level fish, Maine's expression of its criterion as total mercury provides equal or greater protection).

Subsection(1-B) (C) provides for the establishment of site-specific bioaccumulation factors for mercury, which is consistent with EPA's allowance for modification of its §304(a) guidance to reflect site-specific conditions at 40 C.F.R. § 131.11(b)(1)(ii).

Subsection(1-B) (D) directs ME DEP to establish a statewide bioaccumulation factor (BAF) which is "protective of 95% of the waters of the state." In approving this provision, EPA understands this statement was meant to allow use of "either 1) the 95th

upper confidence level on a single mean point estimate of a BAF, if a single BAF is appropriate for the state, or 2) the 95th percentile of BAFs to protect 95% of the waters, if BAFs vary with waters,” with the section regarding site-specific BAFs providing for a higher BAF if appropriate to protect specific waters (May 21, 2004 response from DEP to EPA questions seeking clarification). EPA believes this approach is consistent with established methodologies used to develop criteria, and allows Maine to be appropriately protective of all of its waters.

Subsection(1-B)(E) directs DEP to establish statewide ambient water quality criteria for mercury to protect wildlife, which EPA supports consistent with the goals of the CWA.

Section 1 of Chapter 418 (which enacts 38 MRSA § 413, sub-§11) relates to NPDES permitting and is not considered to be a water quality standard subject to EPA review and action under § 303(c) of the CWA. DEP, in its May 21, 2004 response to EPA’s questions seeking clarification of Chapter 418, clarified that references to antidegradation requirements highlight important antidegradation considerations and do not override or conflict with the antidegradation provisions at 38 MRSA § 464(4)(F).

2. Chapter 574. An Act to Amend Water Quality Laws to Aid in Wild Salmon Restoration.

Chapter 574 revises Maine’s Class AA and Class A provisions to allow discharges intended to assist in the restoration of endangered Atlantic Salmon. Waters classified as AA in Maine are considered outstanding national resources, and water quality is to be maintained and protected [38 MRSA § 464(4)(F)(2)]. We interpret “maintained and protected” to mean no new or increased discharges to Outstanding National Resource Waters (ONRWs) and their tributaries that would lower water quality, with some exception for limited activities that result in temporary and short-term changes in water quality (Water Quality Standards Handbook: Second Edition, EPA-823-B-94-005a, August 1994). However, the discharges that could be authorized by DEP based on Chapter 574 must be for the express purpose of assisting in the restoration of endangered Atlantic salmon by restoring water quality that has been degraded by anthropogenic activity. The Chapter 574 discharge provision is not an authorization to lower water quality in ONRWs. Further, EPA believes that the intent to restore natural ambient water chemistry to aid in the restoration of endangered salmon is consistent with the overall objective of the CWA at 101(a). Therefore, EPA is approving this limited discharge provision.

Attachment B to January 25, 2005 Maine Water Quality Standards Approval Letter

Except as noted in the attached letter, chapters listed below in the first column in bold are acted upon within this letter. Chapters listed in regular text, and sections not included in the chapters listed in bold, are not new or revised water quality standards and therefore are not subject to EPA review and action under § 303(c) of the Clean Water Act.

Chapter	Title of Statute or Rule	Effective date under ME Law
Ch. 418 § 3	(LD 1308) An Act to Implement the Recommendations of the Department of Environmental Protection on Ambient Water Quality Criteria for Mercury	6/15/01 Statute
Ch. 551 § 6 & 7	(LD 1655) An Act to Amend Laws Relating to Environmental Protection	7/30/04 Statute
Ch. 574	(LD 1833) An Act to Amend Water Quality Laws to Aid in Wild Atlantic Salmon Restoration	7/30/04 Statute
Ch. 650	(LD 1158) An Act to Protect Maine's Coastal Water	7/30/04 Statute
Ch. 663	(LD 1891) An Act to Reclassify Certain Downeast Waters	7/30/04 Statute
Ch. 232	(LD 1477) An Act to Amend Certain Laws Regarding Land and Water Quality Protection [enacts provision concerning cooling water intake structures, clarification of definition for "publicly owned treatment works".]	9/21/01 Statute
Ch. 519 (amended)	Interim Effluent Limitations and Controls for the Discharge of Mercury	10/6/2001 Rule
Ch. 579	Classification Attainment Evaluation Using Biological Criteria for Rivers and Streams	5/27/2003 Rule

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